## Vice Admiral J. Kevin Moran

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## Talks about how Navy Knowledge Online serves the education and training needs of today's Navy Sea Warriors



When CHIPS asked the Naval Education and Training Command to explain the significance of the redesigned Navy Knowledge Online, Vice Adm. Moran stepped up to the plate to answer some questions and explain the importance of NKO to today's warfighters.

The right quality and number of trained, professional, joint warfighters are necessary to have the "right" force to take on the challenges of the 21st century. We must invest in our people and their warfighting excellence. By meeting the personal and professional needs of our diverse population of Sailors, Reservists, civilians and their families, we ensure the highest level of personnel readiness. We are developing a Human Capital Strategy to create a workforce that provides the right skills, at the right time, to accomplish the right work.

To realize the opportunities and navigate the challenges ahead, we must have a clear vision of how our Navy will organize, integrate and transform. Sea Power 21 is that vision. It will align our efforts, accelerate our progress and realize the potential of our people. The foundation of Sea Power 21 is our people. Sea Warrior implements our Navy's commitment to the growth and development of our people. It will serve as the foundation of warfighting effectiveness by ensuring the right skills are in the right place at the right time.

Traditionally, our ships have relied on large crews to accomplish their missions. Today, our all-volunteer service is developing new combat capabilities and platforms that feature dramatic advancements in technology and reductions in crew size. The crews of modern warships are streamlined teams of operational, engineering and information technology experts who collectively operate some of the most complex systems in the world.

As optimal manning policies and new platforms further reduce crew size, we will increasingly need Sailors who are highly educated and expertly trained. The goal of Sea Warrior is to integrate the Navy's manpower, personnel and training organizations — active and Reserve — into a single, efficient, information-rich human resources management system.

Its focus is on growing individuals from the moment they walk into a recruiting office through their assignments as master chiefs or flag officers, using a career continuum of training and education that gives them the tools they need to operate in an increasingly demanding and dynamic environment. Through Sea Warrior, we will identify Sailors' precise capabilities and match them to well-articulated job requirements.

Behind the process improvements fostered by Sea Warrior is advanced technology. Navy Knowledge Online, the Navy's knowledge portal, is the key element in ensuring Sea Warrior succeeds in providing the fleet with the right Sailor, who has the right training at the right time. Career path development for enlisted Sailors is well under way through capturing a Sailor's progress along five vectors: professional development; personal development; professional military education and leadership; certificates and qualifications; and professional performance.

The same intelligent agents that analyze a Sailor's job preferences and skills and compare them to available jobs will also interrogate this career model and evaluate the Sailor's progression along each vector and factor this information into assignment recommendations.

This will help Sailors and their supervisors to better understand individual growth and development and highlight strengths and skills that are in need of improvement. Linked directly to the job requirements, the 5 Vector Model (5VM) will help develop the right knowledge, skills and abilities in our Sailors and complete a critical association between personnel and training.

CHIPS: What are some of the new or improved capabilities of NKO?

Vice Adm. Moran: The right information at the right time will enable our Sailors to make the right career choices. Providing this information effectively through NKO is essential.

The goal of NKO Redesign was to improve overall usability of the site by making content easier for users to find. Users will experience a more intuitive display with detailed login and help instructions, an improved user-friendly navigation model and labeling of content. The new layout focuses on content relevant to the individual based upon the user's status: active duty, Reserve, civilian, rank, rate, etc. Changes include a new global navigation structure that supports all users, improved site nomenclature, content and layout improvements for information and community specific user home pages.

Top-level categories are available at all times and local toolbars drill down into those categories to direct users to content

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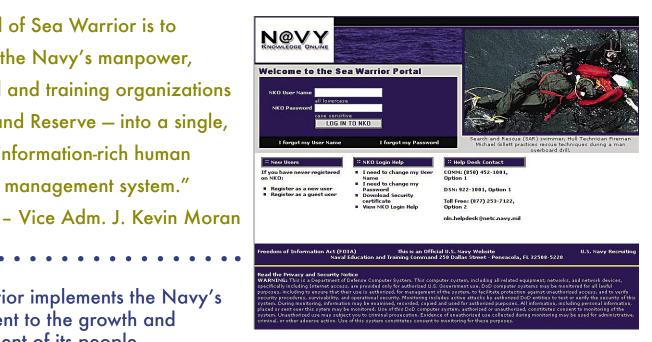
quickly and seamlessly. Category areas, (formerly called tabs), are: Career Management, Leadership, Personal Development, Learning, Reference and Organizations & Communities. The 5 Vector Model, the Navy Personnel Command (NPC) legacy Job Advertising Selection System, now referred to as JASS Career Management System (JCMS), and National Security Personnel System will be found under Career Management. General Military Training (GMT), health and finance will be found under Personal Development.

Navy E-Learning and the electronic training jacket (ETJ) will be found under Learning. Navy library programs, such as the Navy Warfare Library, and Naval Telecommunication Procedures (NTP) will be found under Reference. Learning Centers, Navy Reserve and educational institutions will be found under Organizations & Communities.

NKO will provide access to specific content on the home page through administrator, personalization and user customization. For example, users can manage communities, teams and the group pages they desire to access directly from their home page. A top banner on the home page will now provide immediate access to common tools such as search, advanced search, white pages, instant messaging, the NKO library and user profile. NKO content managers will have the ability to add keywords to allow more precise search tool results for portal pages.

CHIPS: What kind of technologies does the redesigned NKO use?

Vice Adm. Moran: The effective use of technology in support of Sea Warrior is taking training and support capabilities to Sailors wherever they are around the globe. Since June 2004, under a competitively awarded contract, we have employed Computer Sciences Corp. (CSC) to transition to Phase II of NKO development. CSC implemented the Art Technology Group (ATG) Portal Suite with Document Management and Content Administration,



NKO, now designated as the Sea Warrior Portal.

Bantu Instant Messaging and ATG Advanced Search. These leverage Autonomy products, such as the Intelligent Data Operating Layer (IDOL) Server and Dynamic Reasoning Engine (DRE). Autonomy DRE uses natural language and concept matching techniques to provide higher quality search results. Avenue A Razorfish, a CSC partner, has done much of the user and portal analysis for the navigation and redesign transition.

CHIPS: What are some of the functionalities that Sailors use most?

Vice Adm. Moran: Two of the most popular functionalities Sailors use are viewing their electronic training jacket and accessing Navy E-Learning courses. Navy E-Learning hosts over 4,000 courses from information technology to soft skills, to Navy-developed courses. As more courses come online, Sailors in both resident schoolhouses and around the globe are able to take distance-learning courses, whenever it's convenient.

A Sailor's ETJ shows all the training they've taken since coming into the Navy, awards and more. Quickly gaining in popularity on NKO is accessing the Sailor's 5VM, which displays a Sailor's current skill sets along vectors such as professional development, personal development and leadership. The 5VM identifies any skill gaps Sailors might have in a particular area and the skills and courses needed to close those gaps.

CHIPS: Since NKO is a portal, can Sailors log on and use it all day in the performance of their naval duties? In a typical day, how would a Sailor use the diverse features that NKO offers?

Vice Adm. Moran: Many Sailors log on in the morning and remain on the portal all day. Some Sailors log on and look at current events, everything from their specific community, to what is happening around the fleet. Sailors are able to access a myriad of manpower, personnel, training and education applications through NKO. They can search their individual community to

see what's current in their specific field, conduct threaded discussions, chat or instant message with subject matter experts or their peers on a variety of topics. They access their individual 5 Vector Model and ascertain skills required for a specific Navy job or access the JCMS site to see specific jobs and map them against their current skill sets.

They browse the Navy E-Learning catalog and enroll in online courses that range from information technology courses, to leadership and management courses, to specific Navy-developed courses they once could only take in a resident classroom. Sailors may also use the portal to take mandatory courses, such as annual security training. Many Sailors access their electronic training jacket on a routine basis to verify documentation of schooling, coursework or other completed training.

CHIPS: What functionalities of NKO afloat are available to fleet users? Is connectivity a problem for afloat users because of bandwidth constraints?

Vice Adm. Moran: NKO, now designated as the Sea Warrior Portal, is partnering with the Naval Sea Systems Command (NAV-SEA) Distance Support (DS) Program, which is rolling out DS to all ships by early fiscal year 2007. The first spiral phase of NKO with the redesigned look and feel, a subset of content, courses and shipboard specific communities, will be deployed to ships with DS installed early July 2005.

A broader Sea Warrior portal, with NKO as the front door, is being integrated with the JCMS, 5VM, ETJ and more in a spiral development phased approach through October 2005. We're focused on ensuring Sailors afloat are afforded the same access to manpower, personnel, training and educational content and information their ashore counterparts have. This may entail a disconnected (from the Internet) suite of applications, integrated in a way that allows for a much smaller footprint than ashore, so that afloat servers can handle the applications.

Due to the nature of each ship's platform and inherent "at sea" constraints, bandwidth certainly plays a role everywhere; however, we're progressing toward a solution that will work afloat regardless of bandwidth.

CHIPS: What is your process for gathering, analyzing and deploying user requirements?

Vice Adm. Moran: Since June 2004, CSC partnered with Avenue A | Razorfish to take a scientific methodology approach to usability of the NKO portal for the redesign effort. We conducted user research interviewing fleet Sailors, civilians and Reservists stationed in San Diego, Calif., Great Lakes, Ill., Kings Bay, Ga., Norfolk, Va., Reserve stations and onboard the submarine USS Albany (SSN 753), the aircraft carrier USS George Washington (CVN 73), the amphibious assault ship USS Tarawa (LHA 1) and the destroyers USS John Paul Jones (DDG 53) and USS Mason (DDG 87), among others.

The research provided insight into attitudes and behaviors to ensure the redesign would be intuitive and provide value to each

## **NKO** Redesign

The redesigned NKO required transitioning the original Navy Knowledge Online site with the same functionality and capabilities to new servers, using new and current portal technology and migrating more than 20 gigabytes of data, content and courses.

There are now more than 480,000 worldwide users of Navy Knowledge Online. Sailors can learn more about Navy Knowledge Online's redesign functionalities and capabilities by exploring the links on the NKO home page.

Detailed instructions, user guides and tutorials can be found under the "Inside NKO" tab. These links and learning tools will be updated and can be found on the NKO home page under "About NKO." For more information about Navy Knowledge Online or to jump-start your career educational planning, visit the NKO Web site at http://www.nko.navy.mil/.

user. Additionally, we solicited and continue to solicit user feed-back and requirements via a submission form and user surveys that are reviewed by a governance board. If a submission is validated, requirements are prioritized and migrated into the overall program management process for subsequent deployment.

CHIPS: What improvements are planned for NKO in the future?

Vice Adm. Moran: Sea Warrior's rich language of Sailor knowledge, skills and abilities makes possible profound improvements in human systems integration. System engineers can identify the exact capabilities of Sailors in a particular job, take these capabilities to the lab, and design a system that "fits" the Sailor.

As with any program, the advent of technology and systems continue to grow. We need to remain flexible to incorporate those that work to the Sailor's advantage. As we look at the Navy's requirements for Sailors to be trained for specific jobs and skill sets, it's vital we incorporate those tools that will empower Sailors in everyday use, allowing content and information to be updated immediately for their benefit and to meet fleet requirements.

NKO will fit into the workday to enable Sailors to make career decisions while they're in the Navy and whenever they transition to civilian life. We are continuing to analyze how Sailors use the portal, and we are looking at tools that will allow true metrics to be gathered to help us determine the best way to affect that growth.

Sea Warrior, supported through NKO, is a key element in the Navy's transformation. It is all about fleet readiness. We want to make sure we have the right Sailor, in the right place, at the right time, with the right knowledge to meet the Navy's mission requirements.